

CLAIMS

1. A plastic zipper comprising first and second interlockable parts, said first interlockable part having a male profile and said second interlockable part having a female profile, wherein said female profile comprises inwardly facing first and second hooks and outwardly extending first and second wings. *Fig. 4*

5 2. The zipper as recited in claim 1, wherein said female profile further comprises first and second walls, wherein said first wall, said first hook and said first wing are integrally formed, and wherein said second wall, said second hook and said second wing are integrally formed

10 3. The zipper as recited in claim 1, wherein said first wing has an apex having a lateral offset from said center plane which is greater than a maximum lateral offset from said center plane of said first wall.

15 4. The zipper as recited in claim 1, wherein said first wing has an apex having a lateral offset from said center plane which is greater than a lateral offset from said center plane of a junction of a rear surface of said first wing and a side surface of said first wall.

5. The zipper as recited in claim 1, wherein said first hook and said first wing extend in generally opposite directions.

20 6. The zipper as recited in claim 1, wherein said second interlockable part comprises a base, said first hook has a first surface facing said first interlockable part and said first wing has a second surface facing said first interlockable part, said first and second surfaces being neither parallel nor perpendicular to a plane of said base.

7. The zipper as recited in claim 6, wherein said second surface is closer to parallel with said base plane than is said first surface.

25 8. A plastic zipper comprising first and second fastener strips, wherein said first fastener strip comprises a male member having a profile with

an expanded head and said second fastener strip comprises a female member having a profile with a groove for receiving said expanded head of said male member, and wherein said female member comprises first and second generally T-shaped sides defining an opening, wherein each of said first and

5 second generally T-shaped surfaces has a guide surface for guiding said male member toward said opening when said male member impinges on said guide surface, said guide surface having an apex which is laterally offset from a center plane of said female member by an amount which is greater than the lateral offset of an outer junction, said outer junction being located where an
10 undersurface of a transverse portion meets a side surface of a stem portion of a T-shaped side.

9. The zipper as recited in claim 8, wherein said transverse and stem portions of each of said first and second generally T-shaped sides of said female member are integrally formed.

15 10. The zipper as recited in claim 8, wherein said apex of said guide surface has a lateral offset from said center plane which is greater than a maximum lateral offset from said center plane of said corresponding stem portion.

20 11. A package comprising a receptacle having a mouth at an upper end, a plastic zipper attached to said mouth and comprising first and second fastener strips, wherein said first fastener strip comprises a male member having a profile with an expanded head and said second fastener strip comprises a female member having a profile with a groove for receiving said expanded head of said male member, and wherein said female member comprises a base, first and second walls extending from said base, first and second hooks extending from said first and second walls respectively toward a center plane, and first and second wings extending from said first and second walls respectively away from said center plane.

25 12. The package as recited in claim 11, wherein said first wall,

said first hook and said first wing are integrally formed.

13. The package as recited in claim 11, wherein said first wing has an apex having a lateral offset from said center plane which is greater than a maximum lateral offset from said center plane of said first wall.

5 14. The package as recited in claim 11, wherein said first wing has an apex having a lateral offset from said center plane which is greater than a lateral offset from said center plane of a junction of a rear surface of said first wing and a side surface of said first wall.

10 15. The package as recited in claim 11, wherein said first hook and said first wing extend in generally opposite directions.

16. The package as recited in claim 11, wherein said first hook has a first surface facing said first fastener strip and said first wing has a second surface facing said first fastener, said first and second surfaces being neither parallel nor perpendicular to a plane of said base.

15 17. The package as recited in claim 16, wherein said second surface is closer to parallel with said base plane than is said first surface.

20 18. A package comprising a receptacle having a mouth at an upper end, a plastic zipper attached to said mouth and comprising first and second fastener strips, wherein said first fastener strip comprises a male member having a profile with an expanded head and said second fastener strip comprises a female member having a profile with a groove for receiving said expanded head of said male member, and wherein said female member comprises first and second generally T-shaped sides defining an opening, wherein each of said first and second generally T-shaped surfaces has a guide surface for guiding said male member toward said opening when said male member impinges on said guide surface, said guide surface having an apex which is laterally offset from a center plane of said female member by an amount which is greater than the lateral offset of an outer junction, said outer

junction being located where an undersurface of a transverse portion meets a side surface of a stem portion of a T-shaped side.

19. The package as recited in claim 18, wherein said transverse
and stem portions of each of said first and second generally T-shaped sides of
5 said female member integrally formed.

20. The package as recited in claim 18, wherein said apex of said
guide surface has a lateral offset from said center plane which is greater than a
maximum lateral offset from said center plane of said corresponding stem
portion.

10 21. A plastic zipper comprising first and second fastener strips,
wherein said first fastener strip comprises a male member having a profile with
an expanded head and said second fastener strip comprises a female member
having a profile with a groove for receiving said expanded head of said male
member, and wherein said female member comprises first and second hooks
15 extending toward a center plane and defining an opening which communicates
with said groove, and first and second wings extending away from said center
plane, said first hook and said first wing being integrally formed and supported
in a region intermediate the respective ends of said first hook and said first
wing, and said second hook and said second wing being integrally formed and
20 supported in a region intermediate the respective ends of said second hook
and said second wing, said first and second wings having respective surfaces
for guiding an impinging male member toward said opening.

25 22. A plastic zipper comprising first and second fastener strips,
wherein said first fastener strip comprises a male member having a profile with
a base and an expanded head and said second fastener strip comprises a
female member having a profile with a groove for receiving said expanded head
of said male member, and wherein said female member comprises a base, first
and second walls extending from said base, first and second hooks extending
from said first and second walls respectively toward a center plane, and first

ITW-13131

and second target apices located away from said center plane, wherein said zipper has a ratio of target width to zipper height substantially equal to or greater than unity when said zipper is closed.

23. A package comprising a receptacle having a mouth at an
5 upper end and a plastic zipper as recited in claim 22 attached to said mouth.